

REMARKS/ARGUMENTS

Claims 1-4, 6-8, 11-18, 20, 21, 23-25, and 28-32 are pending.

Rejection under 35 U.S.C. §102

Claims 1-4, 6-8, 11, 15, 17-18, 20-21, 23-25, 28 and 32 are rejected under 35 U.S.C. §102(b), as being anticipated by Lee (WO 01/21229 A1).

Claims 1-3, 6-8, 11-18, 20, 23-25, 28-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Hossainy et al. (EP 0 970, 711 A2), for the reasons set forth in the office action mailed 04/18/2008.

Claims 1-3, 6-8, 11, 15, 17-18, 20, 23-25, 28 and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by DeSimone et al. (US 2004/0181271 A1), for the reasons set forth in the action mailed on 04/18/2008.

Claims 1-3, 6-8, 11, 15, 17-18, 20, 23-25, 28 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Hossainy et al. (US 2001/0014717 A1), for the reasons set forth in the office action mailed April 18, 2008.

Applicants traverse all of the rejections above and incorporate by reference all of the previous arguments made in the Amendment filed July 18, 2008.

Arguments

As previously asserted by the Applicants, Lee, DiSimone, Hossainy, and the '717 patent do not anticipate the present invention because none of the cited references describe the polymers having the same Tg or degree of crystallization presently claimed for the first polymer and the polymeric additive.

Claims Contain Physical Features

The Examiner admits on page 3 of the Final Office Action dated January 8, 2009, that “[t]he reference presented by applicants do indeed show that polymers with different molecular weights (size) and particle sizes do exhibit different degrees of crystallization, however applicants have not recited within their claims any physical feature of the polymers (MW or particle size) that would exclude the polymers within the references above,” yet he alleges that the claims fail to recite any of these “physical features.” Applicants respectfully fail to see the relevance. As the references presented previously indicate, crystallinity is a physical property of polymers. Contrary to the Examiner’s assertion, the claims do recite physical properties. For example, claim 1 requires that “the polymeric additive has a degree of crystallinity greater than that of the first polymer and has a glass transition temperature of about -50°C or greater.” There are two different properties recited in the claim - 1) degree of crystallinity; and 2) a glass transition temperature of about -50°C or greater.

Specification Discloses Polymer Differences

The Examiner also asserts in the Final Office Action dated January 8, 2009, on page 3, that “Applicants have not set forth in their claims or within the specification how their polymer would have a different degree of crystallization and Tg than those same polymers known in the art or that are commercially available.” Applicants respectfully assert that the specification describes the term “degree of crystallinity” and how to measure it.

The term or “degree of crystallinity” is defined as the fractional amount of crystalline phase in the polymer sample (by mass), assuming the sample can be subdivided into a crystalline phase and an amorphous phase. The phase is “crystalline” when a three-dimensional order on the level of atomic dimensions is present in the phase. The range of the three-dimensional order is below 50 nm in at least one direction. The degree of crystallinity can be determined by one or more of several experimental techniques, such as X-ray diffraction, calorimetry, density measurements, or infrared spectroscopy. (Specification, page 7, lines 16-22).

The Tg is also disclosed in the specification as:

The “glass transition temperature” (T_g) is defined as a temperature approximately in the middle of the temperature region where the onset of segmental motion in the chains of the polymer occurs leading to the eventual transition of the polymer from a glassy solid to an amorphous solid at atmospheric pressure. To restate in other words, T_g is defined as an average temperature in the temperature region at which an amorphous polymer (or the amorphous regions in a partially crystalline polymer) changes from a hard and relatively brittle condition to a viscoelastic (rubbery) condition. In some embodiments, T_g is intended to be the “average temperature” $\pm 15^\circ\text{C}$, more narrowly, $\pm 10^\circ\text{C}$. In some embodiments, T_g falls within the “average temperature” $\pm 5^\circ\text{C}$. (Specification, page 6, line 17 to page 7, line 4).

Therefore, Applicants have demonstrated that the polymers of the present invention may be different based on crystallinity and T_g , and how to determine the differences.

Reconsideration and withdrawal of the rejections are respectfully requested.

CONCLUSION

Removal of the rejections and allowance of the claims is respectfully requested. Should the Examiner have any questions regarding this communication or any proposals with respect to the claims, the Examiner is invited to contact Robert Auerbach at (415) 954-00315.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 07-1850.

Respectfully submitted,

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